

#### Patent Claims:

1. A process for the transmission of analog- and digital-coded information, characterized in that serial transmission takes place via one channel, both the analog and the digital coding taking place with the same synchronous alternating current of one frequency and phase position, wherein the digital code elements of the digital code are formed by the number, length, time of periods or half-periods and are transmitted as real code words (Fig. 22, CW) or virtual code words (Fig. 24, V1, V2, V3, ...) and the code elements of the analog code (Fig. 22, P1, P1, ...) [Translator's Note: The German text is ungrammatical] in that the PAM samples are transmitted on the amplitudes of the periods or half-periods (Fig. 21) and inserted in series into the code alternating current, so that a coding alternating current is formed in uninterrupted sequence, wherein analog words and real code words (Fig. 16,f,f1) are also inserted between the virtual code words as needed (Fig. 27, A).

2. A process for the encoding of digitized information, characterized in that the digitization takes place through the length, number, time, or phase position of periods or half-periods of an alternating current of the same frequency and phase position, wherein the same size is always assigned to the code words and, at the end, at the beginning, or between the code words, analog periods or half-periods of the same frequency and phase position are provided (Fig. 22).

3. A process for the encoding of digitized information, characterized in that virtual code words are provided (Fig. 23, I, II, III, IV, I, ...), which are formed with an alternating current code made up of the number, time, length, or phase, is transmitted, wherein one channel is formed from each parallel code element (Fig. 23, 1-8), the transmitted code words of the various information are transmitted in series in this process (Fig. 23, 1p, 1p, 1p, 1p, ...), and analog code words are formed in this process between the virtual code words from the PAM samples coded with the periods or half-periods (Fig. 21b), namely, in a number that corresponds to that of the virtual code words (e.g., virtual code word 8 periods = 8 PAM samples, Fig. 21b).

4. A process for the transmission of analog information of several channels, characterized in that the PAM samples are coded with the periods or half-periods and, namely, with the amplitudes of an alternating current of the same frequency and phase position, sampled in a time multiplexed manner, and transmitted in series in an uninterrupted sequence.

5. The process according to patent claims 1 to 4, further characterized in that the transmission of two coding alternating currents takes place on the basis of QAM.

6. The process according to patent claim 1, further characterized in that virtual code words are provided (Fig. 13, 1p-12p, ...), which are formed with an alternating current code made up of the periods or half-periods, each of the same number, which are transmitted, wherein one channel is formed from each parallel code element (Fig. 13, 1-12), in which the real code words of the various kinds of information are coded (Fig. 13, I/1p-II/1p ... IV/1p), whereby the transmission of the virtual code words takes place, with it being possible to insert analog periods between the virtual code words in a number corresponding to the virtual code words.

7. The process according to patent claim 1, further characterized in that, between digital code words consisting of alternating current, a number of PAM-coded periods or half-periods that corresponds to the number of digital code words is introduced.  
(Fig. 22, CW/3 periods - PAM P1, P2, P3 = 3 periods).

8. The process according to patent claims 1 to 4, further characterized in that the virtual code words to be transmitted are divided into two or more code words, the sum of their code elements remaining constant (Fig. 25), if need be with an exchange of the divided code words of various virtual code words.